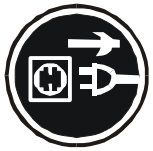
11. Maintenance and Cleaning

The following points have to be considered during the inspection:

1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



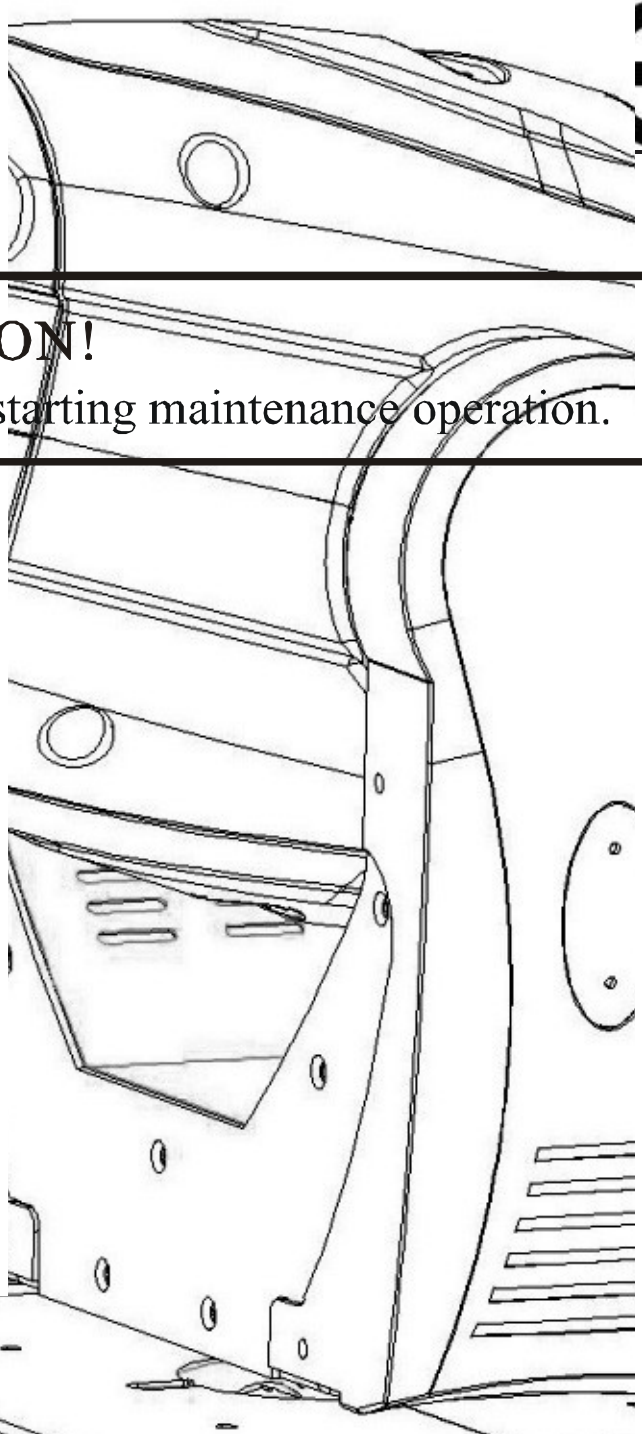
CAUTION!

Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
2) Clean the fan each week.
3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.
There are no serviceable parts inside the device. Please refer to the instructions under “Installation instructions”.
Should you need any spare parts, please order genuine parts from your local dealer.



90W LED Beam Moving Head IB90-MH

User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

1. Unpacking

Thank you for Dialighting's 90W LED Beam Moving Head. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

Dialighting's 90W LED Beam Moving Head is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

IB90-MH adopts powerful Luminus 90W CBM-360-W which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Moving Head---------one
Omega Clamp-------Two
Safety Chain---------One
Signal Cable----one
User Manual----one

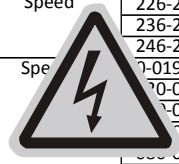
9. Key Features

Luminus high power 90W white LED unit (CBM-360-W)
3728FC/40125LUX (2.5m), 929FC/10000LUX (5m), 391FC/4200LUX(7.5m)
50,000 hours lifespan and low power consumption
16 bit smooth and precise resolution for PAN/TILT movement
540° pan and 270° tilt movement
Scan position memory, auto reposition after unexpected movement
1 color wheel with 5 colors plus open
Variable direction rainbow effect with speed adjustable
1 static gobo wheel with 7 fixed gobos plus open
1 rotatable 5-facet prism with speed adjustable and variable direction
4º projection beam angle
Frost effect
0-100% linear dimmer with 1-18 times/sec high speed electronic strobe
LED shutter with variable speed
12 DMX channels
DMX512, master-slave and sound activated controllable or auto operation (8 built-in programs)

10. Technical Specifications

Input Voltage: AC90-260V 50-60Hz
LED Quantities: 1*90W High brightness white LED unit
Control Signal: DMX512, master-slave and sound activated or auto operation
Control Channel: 12 DMX Channels
Power Consumption: 240W
Dimensions: 203x 300x437mm
Packing Dimensions: 253 x 350 x 487mm
Net Weight: 12.5kgs
Gross Weight::15kgs

10	Frost	0-199	Frost swing out
		200-255	Frost swing in
11	Pan/Tilt Speed	0-225	Max to min speed
		226-235	Blackout by movement
		236-245	Blackout by all wheel changing
		246-255	Empty
12	Spe	0-019	Color change normal
		020-029	Color change to any position
		030-039	Color & gobo change to any position
		040-079	Empty
		080-099	Motor reset
		100-119	Internal program 1
		120-139	Internal program 2
		140-159	Internal program 3
		160-179	Internal program 4
		180-199	Internal program 5
		200-219	Internal program 6
		220-239	Internal program
		240-255	Internal program



CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

2. Safety Instructions

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.
This device falls under protection-class I. Therefore it is essential that the device be earthed.
The electric connection must carry out by qualified person.
The device shall only be used with rate voltage and frequency.
Make sure that the available voltage is not higher than stated at the end of this manual.
Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.
Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.
Please don't project the beam onto combustible substances.
Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

3. Operation Instructions

-The moving head is for beam effect for onsite decoration purpose.
-Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
-This light should be keep away from strong shaking during any transportation or movement.
-Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
-Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.
-Make sure the installation place is in good safety condition before installing the fixture.
-Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
-Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
-Make sure the fixture is operated by qualified personnel who knows the fixture before using.
-Keep the original packages if any second shipment is needed.
-Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
-It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

4. Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by
unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point

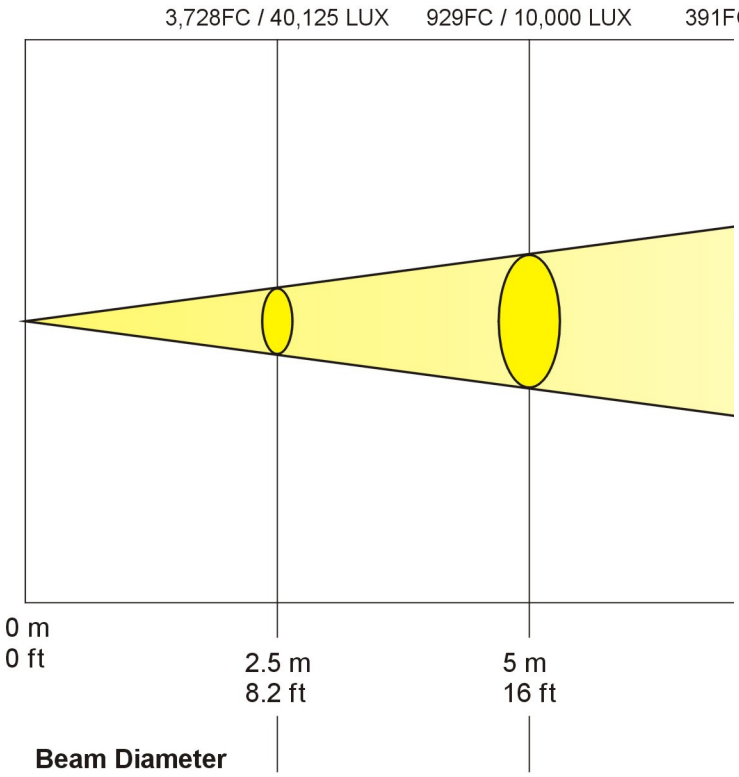
load of 10 times the device's weight.
Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.
Never stand directly below the device when mounting, removing, or servicing the fixture.

6	Gobo	0-009	Open/White
		010-019	Gobo 1
		020-029	Gobo 2
		030-039	Gobo 3
		040-049	Gobo 4
		050-059	Gobo 5
		060-069	Gobo 6
		070-079	Gobo 7
		080-099	Gobo 1 shake slow to fast
		100-119	Gobo 2 shake slow to fast
		120-139	Gobo 3 shake slow to fast
		140-159	Gobo 4 shake slow to fast
		160-179	Gobo 5 shake slow to fast
		180-199	Gobo 6 shake slow to fast
		200-219	Gobo 7 shake slow to fast
		220-255	Rot. gobo wheel cont. rotation slow to fast
7	Shutter	0-031	Shutter closed
		032-063	Shutter Open
		064-095	Strobe effect slow to fast
		096-127	Shutter Open
		128-159	Pulse-effect in sequences
		160-191	Shutter Open
		192-223	Random strobe effect slow to fast
		224-255	Shutter Open
8	Dimmer	0-255	Dimmer 0%...100%
9	Prism	0-005	Prism swing out
		006-127	Prism swing in
		128-189	Forward rotation from fast to slow
		190-193	Prism rotation stop
		194-255	Backward rotation from slow to fast

7. Photometric Data

4° Beam Angle

LUX × 0.0929=FC



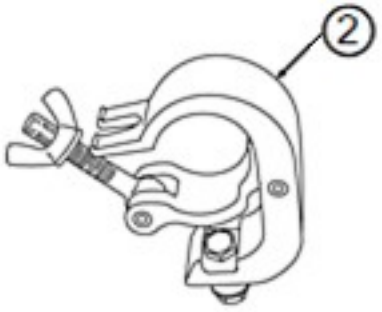
Beam Diameter

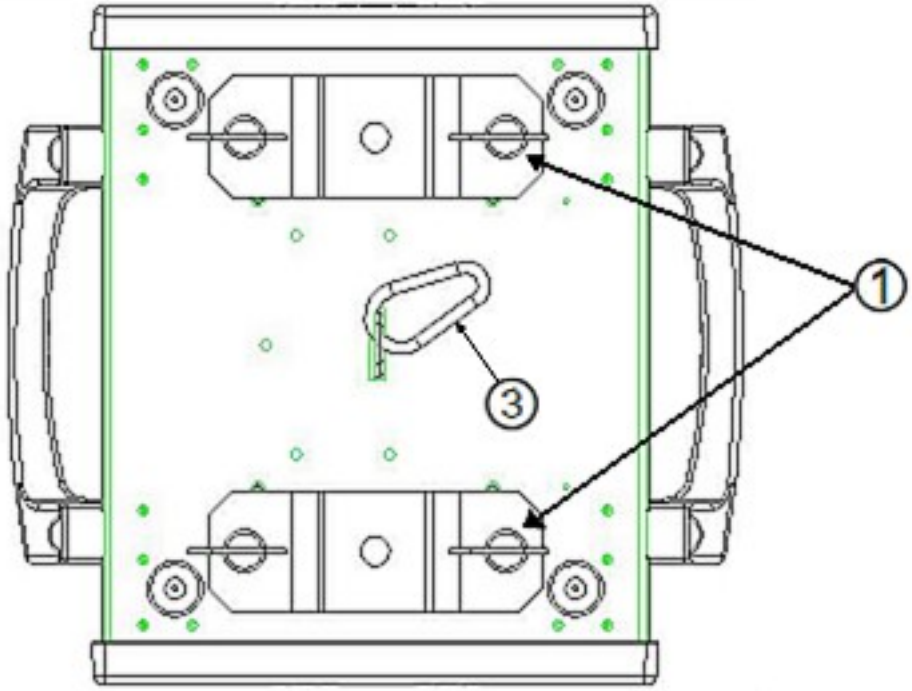
4° Beam Angle	Ø 0.25m / Ø 0.82ft	Ø 0.50m / Ø 1.64ft

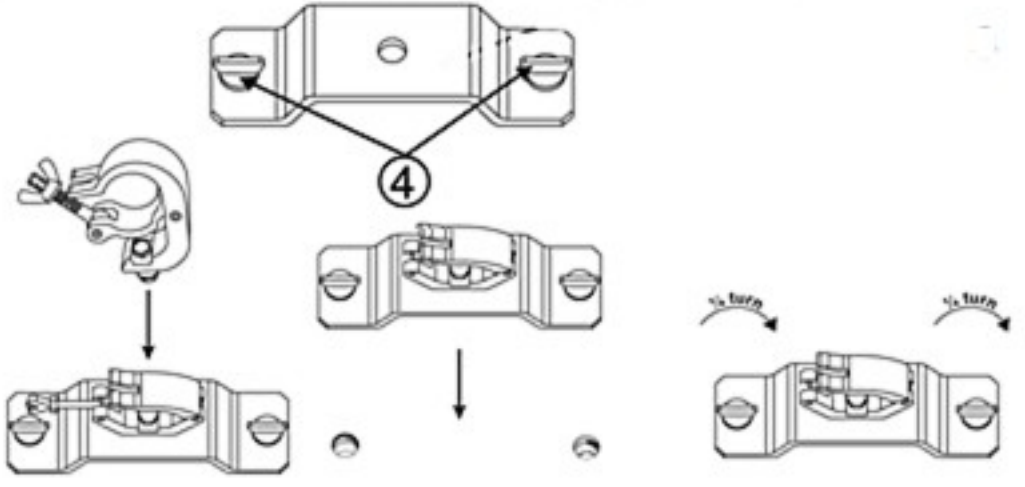
8.DMX Channels

Chanel	Function	Values	Description
1	Pan	0-255	PAN Movement
2	Pan Fine	0-255	Fine control of Pan movement
3	Tilt	0-255	Tilt Movement
4	Tilt Fine	0-255	Fine control of Tilt movement
5	Color	0-019	Open/White
		020-039	Color 1
		040-059	Color 2
		060-079	Color 3
		080-099	Color 4
		100-127	Color 5

from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.).
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.
Mounting points: Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.



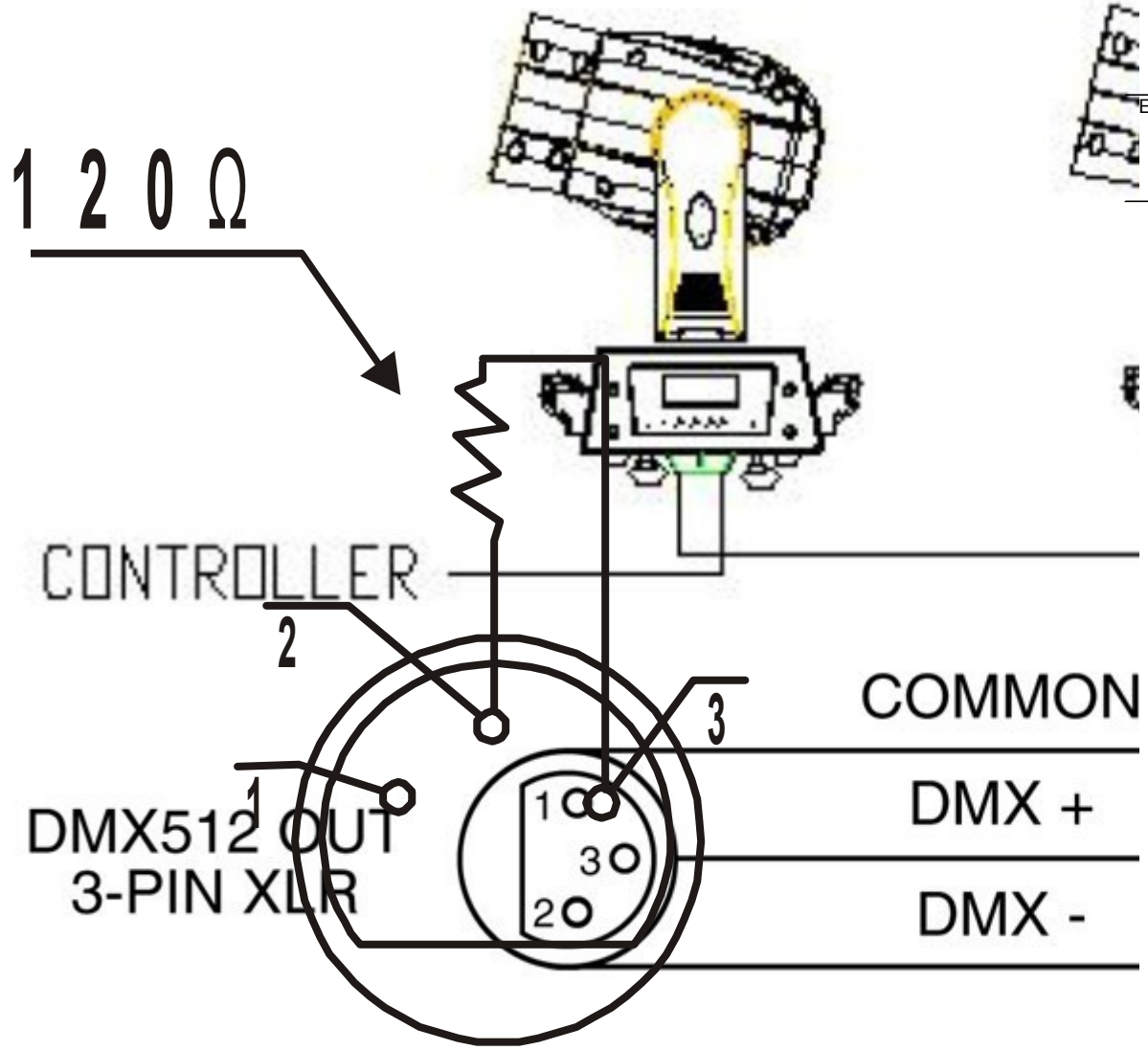




Regardless of the rigging option you choose for your SPOT LED, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

5. DMX-512 control connections

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple
Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.
DMX-512 connection with DMX terminator



6. Menu Operations

DMX Address	A001~Axxx			
Auto Play	Auto Run Music Control	Master/Alone Master/Alone		
Reset	On/Off			
Reverse Pan	On/Off			
Reverse Tilt	On/Off			
Mic Sensitivity	0~99%			Sensitivity of mic
Special	Reset Default	On/Off		
	Calibration	Code:088		
		PAN, TILT, Color Wheel,Gobo Wheel, Prism, Frost		
	Temperature	XXX℃/℉		
	Manual Control	PAN=XXX……		
Edit Program	Auto Program1 .. Program8	Steps(1..48) Scenes 01 .. Scenes XX	Pan=XXX… … Time=xx.xS	

`PIN 2